# BY ORDER OF THE COMMANDER 934TH AIRLIFT WING

934 AIRLIFT WING INSTRUCTION 48-103

15 NOVEMBER 2016

Aerospace Medicine

RADIO FREQUENCY RADIATION SAFETY PROGRAM



# COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This operating instruction implements Air Force Policy Directive (AFPD) 48-1, Aerospace Medical Program; AFI 21-101 AFRC Supplement, Aircraft and Equipment Maintenance Management; AFI 48-109, Electromagnetic Field Radiation (EMFR) Occupational and Environmental Health Program, and establishes responsibilities and procedures for operating fixed and mobile radiation emitters. It applies to all personnel assigned permanently or temporarily to the 934 Airlift Wing (AW). Commanders, supervisors and superintendents are responsible for ensuring compliance with this instruction. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, Recommendation for Change of Publication; route AF Forms 847 through appropriate chain of command. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, Management of Records, and disposed of in accordance with Air Force Records Information Systems (AFRIMS) Records Disposition Schedule (RDS) located at <a href="https://www.my.afmil/afrims/afrims/afrims/rims.cfm">https://www.my.afmil/afrims/afrims/afrims/rims.cfm</a>.

### **SUMMARY OF CHANGES**

This document has been revised and must be completely reviewed. AFI 21-101 and AFI 48-109 references incorporated, acronym list updated.

1. Responsibilities: All base supervisors responsible for those personnel with access to the flight line area and building 805 will ensure those personnel are informed of this Airlift Wing instruction. Operators of the systems addressed in this AWI are responsible for ensuring safety

procedures outlined in paragraph 3 are followed. Maintenance personnel will review the Radiation Frequency (RF) video and power point showing hazard areas annually. Training will be annotated in G081 under the applicable course code. Personnel of other areas with access to the flight line area will be familiar with this AWI for safety awareness purposes. Documentation for these individuals will utilize their unit's procedures.

# 2. Location of Fixed and Mobile Emitters of Radiation Frequency Radiation:

- 2.1. South side of building 805, Communications/Navigations section has a fixed UHF, HF and VHF antenna mounted on the roof.
  - 2.1.1. Aircraft parking spots 1-9A, when aircraft radios and radar are operating.

#### 3. Procedures:

- 3.1. Radiation warning signs are not required during the operation of any communication, navigation or radar systems. Warning signs are used on the flightline when the AAQ-24 Large Aircraft Infrared Countermeasures (LAIRCM) system is operated by maintenance technicians.
- 3.2. Aircraft parking spots 1 through 9A are approved for operating aircraft radios and radar with no additional restrictions. Aircraft parking spot 1 is normally used when the LAIRCM system is operated. When LAIRCM is operated in a parking spot other than spot 1 normal safety precautions still apply. It is the responsibility of the radio and radar and laser operator to inform other personnel in the vicinity when transmitting so proper safety precautions can be made. The following are precautions for the stated systems:
  - 3.2.1. AN/ARC-164/186 UHF/VHF Radios: Keep personnel clear of antenna when transmitting. Do not transmit during fueling or servicing liquid oxygen (LOX) servicing.
  - 3.2.2. AN/ARN-118 TACAN System: Keep personnel 30 inches away from antenna when transmitting. Do not transmit during fueling or servicing LOX.
  - 3.2.3. AN/ARC-190 HF Radio System: Ensure no one is performing maintenance on top of the aircraft when transmitting. Do not transmit during fueling or servicing LOX.
  - 3.2.4. AN/ALR-69 Radar Warning System: Do not stand within 6 feet of PLM-4 and APM-427 test simulators during receiver testing. Do not transmit during fueling or servicing LOX.
  - 3.2.5. AN/APN-241 Low Power Color Radar: Avoid prolonged exposure in front of the nose radome when transmitting. Do not transmit during fueling or servicing LOX.
  - 3.2.6. AN/AAQ-24 LAIRCM: Avoid entering the area of the warning cones while aircraft LAIRCM system is operating. Do not transmit during fueling or servicing LOX.

# 4. Overexposure:

- 4.1. Any suspected or alleged overexposure will be promptly reported to the following:
  - 4.1.1. Maintenance Operations Control Center at 713-1328/1330/1352; Radio Call Sign: MOC.

- 4.1.2. Bio-Environmental Engineering (934 MSG/SGPB) at713-1608/1611.
- 4.1.3. Immediate Supervisor.

ANTHONY G. POLASHEK, Colonel, USAF Commander, 934th Airlift Wing

### **Attachment 1**

### GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

## References

AFI 21-101 AFRC Supplement, Aircraft and Equipment Maintenance Management, 24 August 2015

AFI 48-109, Electromagnetic Field Radiation (EMFR) Occupational and Environmental Health Program, 1 August 2014

AFMAN 33-363, Management of Records, 1 March 2008

AFPD 48-1, Aerospace Medicine Enterprise, 23 August 2011

## **Adopted Forms**

AF Form 847, Recommendation for Change of Publication

## Abbreviations and Acronyms

**AF**—Air Force

**AFMAN**—Air Force Manual

**AFPD**—Air Force Policy Directive

**AFRIMS**—Air Force Records Information Management System

**AW**—Airlift Wing

**AWI**—Air Wing Instruction

**HF**—High Frequency

**LAIRCM**—Large Aircraft Infrared Countermeasures

**LOX**—Liquid Oxygen

MXG/CC—Maintenance Group Commander

**OPR**—Office of Primary Responsibility

**RDS**—Records Disposition Schedule

**RF**—Radiation Frequency

**TACAN**—Tactical Air Navigation

**UHF**—Ultra High Frequency

**VHF**—Very High Frequency